

CLAIMS

1. In an image pickup apparatus comprising a plurality of image pickup units including an image pickup device and a front lens, said adjacent image pickup units being located in such a manner that image pickup areas of said image pickup units may overlap each other, an image pickup apparatus is characterized in that said image pickup units are located in such a manner that a conditional equation:

$$AL < fD \quad \dots (1)$$

is satisfied where a point at which principal ray at the end of an angle of view is extended to cross an optical axis at each said image pickup unit is defined as a viewpoint center, a cross-section passing said viewpoint center, said image pickup device and said front lens is created in the direction in which said adjacent image pickup units and said image pickup areas overlap each other, a cross-section length of said image pickup device is assumed to be A in said cross-section, a cross-section length of said front lens is assumed to be D , a length from said front lens to said image pickup device is assumed to be L and a focal length which results from synthesizing the whole of lenses within said image pickup unit containing said front lens is assumed to be f ; and

that said viewpoint centers of said plurality of image pickup units lie within a sphere with a diameter of 20 mm.

2. An image pickup apparatus according to claim 1, wherein said adjacent image pickup units and said image pickup areas overlap each other in a plurality of directions and said image pickup units satisfy said conditional equation (1) in all of said plurality of directions.